

REMARKS

The present request is submitted in response to the Final Office Action dated June 9, 2003, which set a three-month period for response, making this amendment due by September 9, 2003.

Claims 7-11 are pending in this application.

In the Office Action, the listing of references in the specification was not objected to as a proper information disclosure statement under 37 CFR 1.98(b). The corrected drawings received on March 14, 2003 were disapproved. The drawings filed on October 18, 2001 were objected to under 35 CFR 1.84(h)(5) on grounds that Figure 1 shows modified forms of construction in the same view. Claims 7-11 were objected to for various informalities. Claims 7-11 were also rejected under 35 U.S.C. 112, second paragraph, as being indefinite. Claims 7, 10, and 11 stand rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 4,095,575 to Wulf.

The Applicants note with appreciation the indicated allowability of claims 8 and 9 if rewritten to overcome the rejections under 35 U.S.C. 112, second paragraph, and to include the limitations of the base claim and any intervening claims.

CFR 1.98(b).

With regard to the objections to the drawings, the Applicants file herewith new Figure 1, in which the catalyzer corresponding to claim 11 is shown.

Regarding the objections to the claims and rejections of the claims under 35 U.S.C. 112, second paragraph, the claims have been amended to address the noted grounds of rejection by rewriting the claims to adopt U.S. claim standards. Objectionable language has been eliminated or rewritten, without significant broadening or other significant changes in scope in the rewritten claims.

Looking now at the substantive rejection of the claims, the Applicants respectfully disagree that the Wulf patent anticipates the present invention as defined in pending claims 7-11. Indeed, the significant difference between claim 7 and the Wulf patent is that with the present invention, the gas is supplied into the heat exchanger and thereby displaces the coolant. In contrast, with the system of the Wulf patent no supply device is disclosed. In addition, the coolant, based on its gravity, flows through the drainage line 22 into the overflow tank 18. While, arguably, gas flows out of the overflow tank 18 into the heat exchanger for pressure equalization, the gas has no displacement action in Wulf, since the same pressure prevails in the overflow tank as well as the heat exchanger, and merely the vertical difference between the heat exchanger 7 and the normal level N permits running off of the coolant. Therefore, the heat exchanger 7 must always be arranged above the common cooling system of the internal combustion engine, which signifies a large limitation in motor vehicles. This limitation also is very, because not only the heat exchanger must have a sufficient drop or depression with reference to the general cooling circuit, such that it can be emptied sufficiently quickly, but also because the exhaust lines 6 of the engine must be positioned correspondingly high in the motor vehicle. These

are substantial restrictions when one considers that an exhaust catalyzer must still be accommodated in front of the heat exchanger in the exhaust system.

Therefore, the Applicants respectfully submit that independent claims 7 and 10 both define over the Wulf patent in light of these significant differences. Again, claims 7 and 10 do not claim that the gas from the gas reservoir does not "flow into" the cooling means, rather "is supplied". In addition, the independent claims 7 and 10 define that the gas displaces the coolant from the heat exchanger, that is, displaces the gas out of the heat exchange and the gas does not simply wash or pour out. Finally, the independent claims of the present application define that the gas is supplied back into the gas reservoir, or "returned" to the gas reservoir, shortly before the shutoff device is opened.

In marked contrast, in the Wulf reference, no gas is supplied. IN addition, first the shut off vale 11 is opened to the line 16 and closed to the line 12, so that the pump 15 can supply coolant into the heat exchanger 7. With a closed line 16, the heat exchanger 7 cannot be filled.

With the subject matter of claim 7, the gas is supplied back to, or returned, from the coolant channels into the gas reservoir with a closed shutoff valve 20. Thus, coolant can flow back into the heat exchanger 10 through the coolant return line 28, so that this is filled before the valve 20 opens. In this manner, mixing of the gas with the coolant is prevented, thereby preventing damage to the functioning of the entire cooling system.

In the Wulf reference, the cooler 13 is filled when the heat exchanger is emptied. This means that the coolant level in the cooler 13 correspondingly

drops when the heat exchanger 7 is filled by means of the pump 15. Therefore, in the upper part of the cooler 13, a low or negative pressure exists, which can lead to degassing of the coolant. If the cooler 13 is subsequently filled again, the gas mixes with the coolant, which can cause the formation of foam and minimize the cooling action of the coolant.


In contrast, with the system of the present invention, the excess pressure in the cooling circuit can be maintained each time in the cooling circuit of the internal combustion engine.

Therefore, the Wulf reference cannot be viewed as anticipatory of the present invention as defined in pending claims 7-11 for the reasons set forth above. The Applicants therefore request withdrawal of the final rejection under 35 U.S.C. 102 and reconsideration of the claims as herein amended.

In light of the foregoing arguments in support of patentability, the Applicants respectfully submit that this application stands in condition for allowance. Action to this end is courteously solicited.

Should the Examiner have any further comments or suggestions, the undersigned would very much welcome a telephone call in order to discuss appropriate claim language that will place the application into condition for allowance.

Respectfully submitted,



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